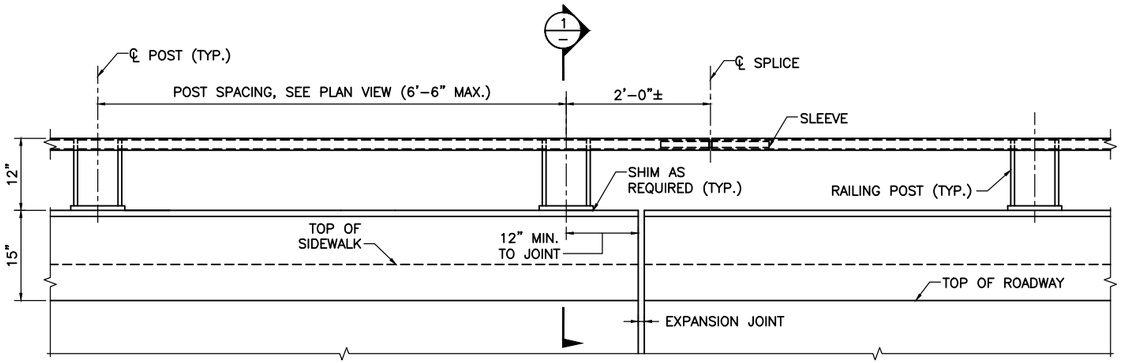
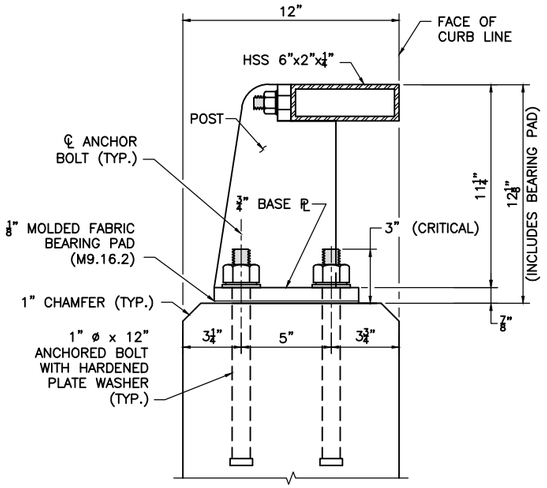
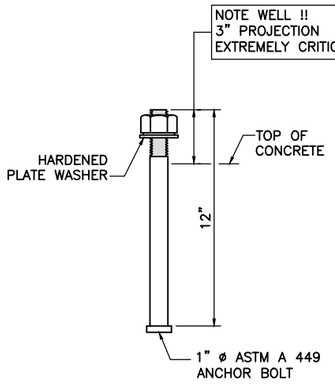


ELEVATION
SCALE: 1" = 1'–0"



SECTION 1
SCALE: 3" – 1'–0"

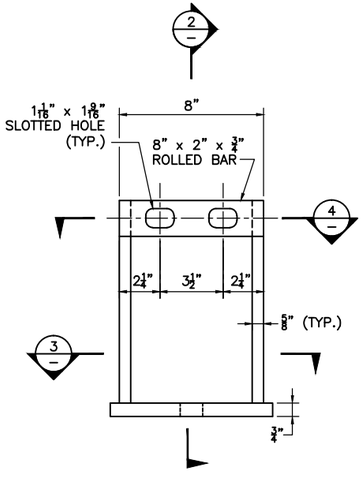


ANCHOR BOLT
SCALE: 3" – 1'–0"

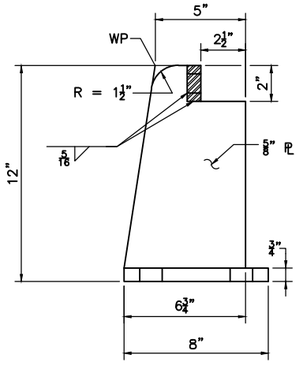
CITY/TOWN
STREET/ROUTE # OR NAME

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	–	6	X
PROJECT FILE NO. XXXXXX			

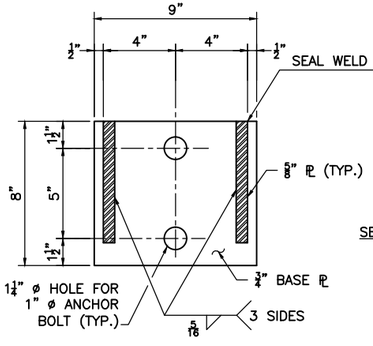
BR-2 BRIDGE RAILING.DWG 4-Mar-2014



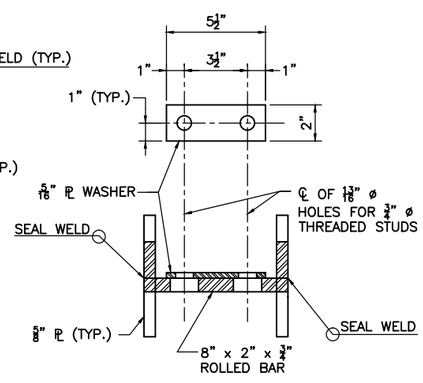
ELEVATION



SECTION 2

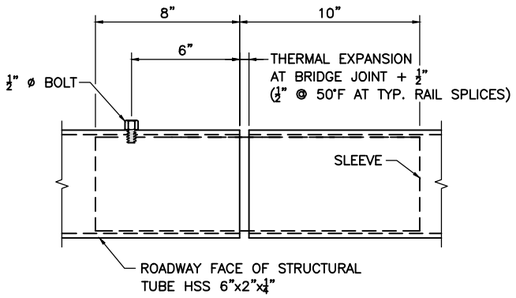


SECTION 3

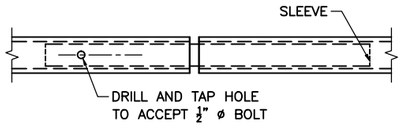


SECTION 4

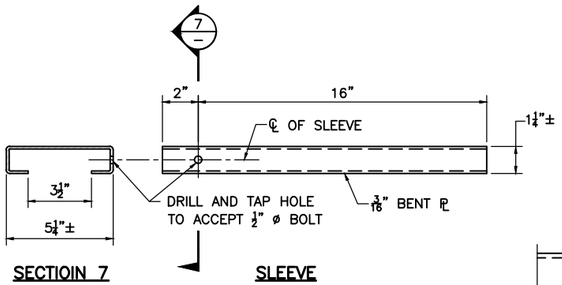
RAIL POST DETAILS
SCALE: 3" – 1'–0"



PLAN

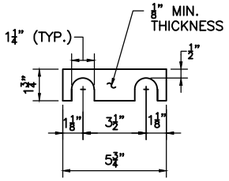


REAR ELEVATION

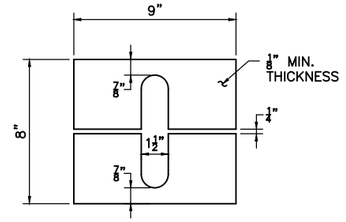


SECTIOIN 7 **SLEEVE**

TYPICAL SPLICE DETAILS
SCALE: 3" – 1'–0"

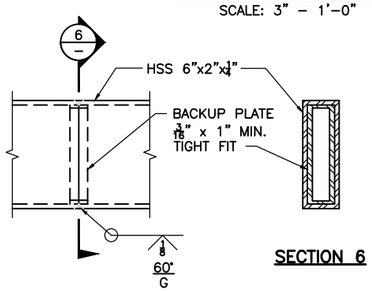


RAILING SHIM DETAIL
SCALE: 3" – 1'–0"



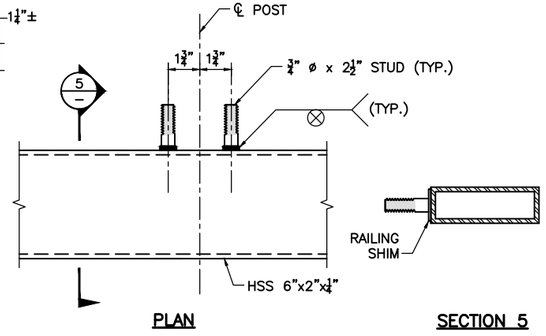
NOTE:
BEVEL SHIM AS REQUIRED TO ENSURE POSTS ARE ERECTED PLUMB.

POST SHIM DETAIL
SCALE: 3" – 1'–0"



SECTION 6

TUBE–WELDED SPLICE
SCALE: 3" – 1'–0"



PLAN **SECTION 5**

STUD DETAIL
SCALE: 3" – 1'–0"

FINISH:

POSTS, RAILS, BASE PLATES, AND SPLICE TUBES SHALL RECEIVE XXXXXX FINISH.

MATERIALS:

STRUCTURAL STEEL TUBING	ASTM A 500 GRADE B GALVANIZED
POST AND BASE PLATE	AASHTO M 270 GRADE 36 GALVANIZED
ANCHOR BOLTS	ASTM A 449 GALVANIZED
NUTS, BOLTS, AND WASHER	ASTM A 325 GALVANIZED
STUD	ASTM A 108

GENERAL NOTES:

1. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR POSTS, IF POSSIBLE. IF NEEDED, HSS 6"X2"X¼" RAILS MAY BE CONNECTED IN THE SHOP BY USING THE TUBE–WELDED SPLICES, AS SHOWN IN THE PROVIDED DETAIL.
2. RAILS SHALL HAVE A TUBE SPLICE IN THE PANEL OVER A BRIDGE EXPANSION JOINT.
3. ANCHOR BOLTS SHALL BE SET WITH TEMPLATES. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN AFTER STEEL IS IN PLACE.
4. ALL POSTS TO BE PLUMB WHEN PROFILE GRADE EXCEEDS 1.5%. FOR PROFILE GRADES LESS THAN 1.5%, POSTS SHALL BE SET PERPENDICULAR TO GRADE.
5. WELDING SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AASHTO/AWS D.1.5, EXCEPT THAT WELDING OF THE TUBE–WELDED SPLICE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWS D.1.1.

MONTH DD, YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

Xxxxxx Structural Submittal (Sil) DD-Month-YYYY

BR–2 BRIDGE RAILING

SHEET XX OF XX SHEETS BRIDGE NO. X–XX–XXX (XXX)

Date: June 2013